

# **PAPA 2012 Annual Meeting**

## **Pinedale , Wyoming**



**QEP Pinedale Division**

**February 23, 2012**

# 2011 Summary

- Drilled and completed 105 wells
- 635 producing wells
- 73 well pads
  - 1 new pad built in CDA
  - 7 pad expansions in CDA
  - 1 delineation pad built outside CDA (SP 7-28): 2 wells drilled and completed and interim reclamation applied prior to November 15, 2011
  - 8 pads fully developed with interim reclamation within CDA
  - 64 pads (88%) with interim reclamation (18 on pads with no current plans for further development)
  - All pits closed on inactive pads
- Pinedale Anticline Monitoring and Mitigation Fund
  - Operators pay \$7500 per well spud
  - \$825,000 paid to MMF for 110 spud wells in 2011
  - \$5,497,500 paid to MMF since September 2008 ROD inception



# 2011 Emissions Summary

- 634 producing wells in DA-1 connected to LGS
- LGS implemented in 2005; all future wells to be connected to system
- Over 139,632 truck trips eliminated since LGS installation
- Rig air permit received on 6-10-10
  - As of 12-30-11, all rig engines are equipped with SCR controls
- Annual OZONE contingency plan updated & training completed
- Implemented quarterly Leak Detection and Repair program at all QEP well pads in 2011



# 2011 Water Summary

- 939,487 barrels of fresh water from water supply wells used for operations
  - Drilling – 650,959 bbls
  - Completions – 114,380 bbls
  - Dust control – 135,748 bbls
  - Stock water – 38,400 bbls
- Produced water volume – 3,552,965 barrels
  - Piped via QEP's LGS to AntiCline for processing or to QEP's water disposal well facility for disposal
- Completions
  - 2,172,933 bbls of water used for completion operations
  - 94.7% of this volume was recycled produced water (2,058,553 bbls)



# 2012 Overview

- Focused development activity within the CDA includes (but not limited to) pad construction, drilling, completions, production facility installations, well hookups and full interim reclamation
- Currently rigs are on 6 development pads within CDA
  - Mesa 7-18, 15-18, 13-17, 3-17, 16-16 and 11-9
  - Anticipate drilling and completing approximately 116 wells
- Construction of 2 new well pads in CDA for 2012/2013 planned activity
- Expansion of 5 existing well pads in CDA for 2012/2013 activity
- Fall 2012 reclamation planned on 11 well pads (8 on pads with no future development plans)



# Field Development Update

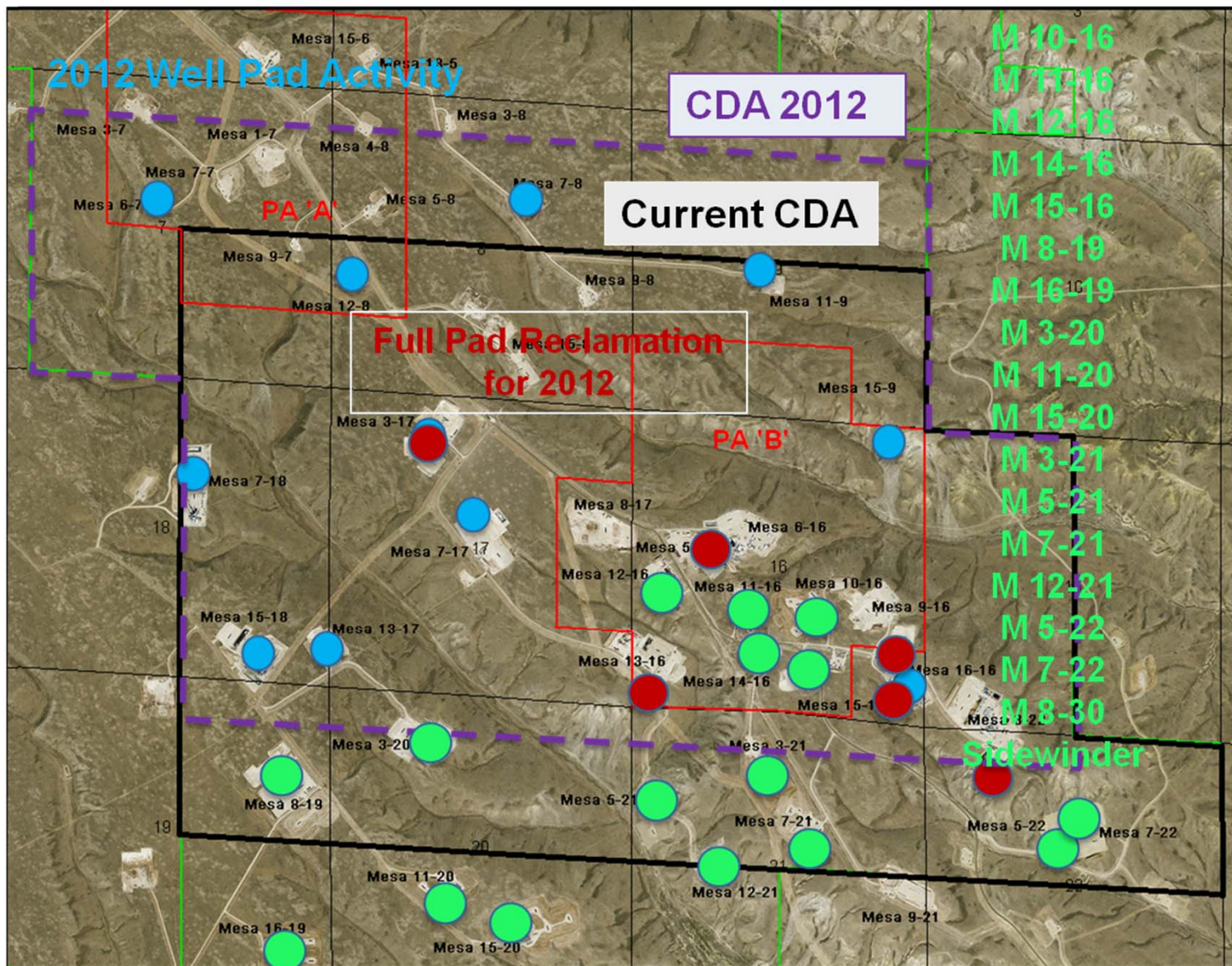
- 73 existing pads; estimate a maximum of 100 pads upon completion of full field development
- 64 of 73 pads have active interim reclamation; 88%
- 18 of 73 pads have interim reclamation and no further development plans; 25%
- 860 acres of total pad disturbance; 465 acres with reclamation; 54% of pad disturbance is reclaimed
- All pits closed on inactive pads
- Southern ½ mile tier of CDA fully developed and in interim reclamation fall 2011. CDA is ready to move ½ mile north.





# CDA Activity Map

Full Well Pad Reclamation for 2011



NYSE: QEP



# 2012 ANNUAL PLANNING MEETING

23 Feb 12

Aimee Davison  
Sr. Regulatory Specialist  
Planner

Tim Murray  
Pinedale Development



# LOCATIONS FOR CONSTRUCTION AND DEVELOPMENT

## **Feb 2011 to Feb 2012**

- 2 new locations built
- 27 wells drilled

## **Feb 2012 to Feb 2013**

- One new location to build
- Estimate 38 wells drilled

## **Monitoring and Mitigation Fund**

- 68 spud payments at \$7,500 for \$510,000 contribution in 2011
- \$3,742,500 contribution to date

# RECLAMATION

- **708.36 Acres of Disturbance, 569.41 Acres Reclaimed; 80%**

- 66.48 Acres Site Stabilization

- 172.12 Acres Interim Reclamation

- 23.71 Acres Final Reclamation

- 6.5 Acres Final Reclamation - access roads

- 300.6 acres reclaimed pipeline rights of way

- 53 of 77 pads have site stabilization and/or interim reclamation

- 6 of 77 pads have final reclamation

# LGS

- **LGS completed and operational in DA 1, 2, 3 and 4**

- **DA5**

- Extension granted in 2010 to gather more information to design DA5 development and LGS that is the optimal size and in the most efficient locations
- Reduces the potential for unnecessary wildlife and habitat disturbance

- **Reducing Emissions, Minimizing Wildlife/Habitat Disturbance**

- Closed all drilling and completion pits
- Bimonthly FLIR camera surveys to ID and correct fugitive emissions
- Reduced truck traffic (travel management plan, pup trailers to consolidate loads, new produced water and condensate truck unloading facilities at Central LGS)
- Installed vapor recovery compression at Central LGS to further reduce VOCs and NOx

- **Work continues**

- Explored “wet gas” collection
- Obtained seismic data and completed 4 test wells, no additional drilling in DA5 until LGS solution in place
- Exploring all available options, including 3<sup>rd</sup> party alternatives
- Commitment is an LGS for DA5 operational by September 2013 or no further development in

# WATER USE AND MONITORING

## Water Use

- 87% of disposed water went into the South Mesa Injection Facility
- 13% of disposed water went into the Big Piney Injection Facility
- Water re-use more than 74%

## Monitoring

- Continue to track groundwater usage on a quarterly basis by water well
- All water wells equipped with double check valves and totalizer flow meters or locked when not in use

# Q & A





# Pinedale Anticline Annual Planning Meeting

February 23, 2012

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- Activity
  - 2011 - Drilled 212 wells, average of 7.8 rigs operating in the year
  - 2012 - Plan to drill ~ 48 wells, average 2.4 operating rigs
- Pads
  - 2011 - 9 built, 1 expanded, 29 interim reclamation
  - 2012 - 3 planned to build, 6 interim reclamation planned
  - Total to date: 127 pads interim reclaimed, 15 pads final
- LGS
  - ROD requirement met by completing LGS system in 2010
  - At year end 2011, 885 wells were connected to our gathering system

# Pinedale Anticline Annual Planning Meeting

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- Water
  - 100% of completion water is recycled water.
  - 79% of produced water is now injected for disposal
  - 7% sent directly to completions
  - 14% is sent to a facility for recycle or disposal
- Projects
  - 100% pits are closed
  - All Ultra rigs use SCRs to reduce NOX emissions
- Pinedale Anticline Monitoring and Mitigation Fund
  - Additional \$1,365,000 contributed in 2011
  - Cumulative total \$7,350,000